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09/528,581	03/20/2000	MITSUAKI TERADAIRA	P4985A	4940

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EXAMINER	
TRAN, DOUGLAS Q	
ART UNIT	**PAPER NUMBER**
2624	10

DATE MAILED: 03/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/528,581	TERADAIRA ET AL.	
	Examiner	Art Unit	
	Douglas Q. Tran	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20 and 25-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20 and 27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *25-26, 28-31* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Newly submitted claims 25-26, and 28-31 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-20, and 27, drawn to the data stream including a first command type and a second command type which are processed at the printing apparatus.

II. Claims 25-26, and 28-31, drawn to the method of sending the separate commands in which the data stream containing a first predetermined command and the second command is sent next to disable execution of any first command.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 25-26, and 28-31 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-4, 8-17, 19-20, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akiyama et al. (US Patent No. 5,594,653) in view of Motomi (JP 10278364 A).

As to claim 1, Akiyama teaches a printer adapted to be connected to a host device and to receive a data stream from the host, the printing apparatus comprising:

a receiver (i.e., receiving means 62 in fig. 5) for receiving the data stream including a first command type (i.e., print data) and a second command type (i.e., command data) to control the printing apparatus (col. 7, line 66 to col. 8, line 1);

a first processing section (i.e., command interpreter 66 in fig. 5) responsive to commands of the first command type for executing a first process in accordance with any command of the first command type included in the data stream (col. 8, lines 29-33: the data codes from the print data is processed for printing);

a second processing section (i.e., control means 68 in fig. 5) responsive to commands of the second command type for executing a second process in accordance with any command of the second command type included in the data stream, the second processing section executing the second process in preference to the first processing section performing the first process (col. 8, lines 26-28: the command data is applied to the print data and controls the printing apparatus by control means 68);

an indication device (i.e., table 2 and 3 in col. 10 or "col. 9, lines 42-45") indicating either an enabled or disabled state (the tables 2 and 3 indicating the states of enabled or disabled), and

setting means for setting the state indicated by the indication device (col. 10, lines 26-27 and 41-42: the states of enabled or disabled is set to 0 or 1),

wherein the indication device indicates the enabled state (col. 9, lines 47-50: the control means 68 monitors the information from RAM 53 "col. 9, lines 42-45" and determines to stop or perform the printing apparatus based on the states of the printing apparatus such as off line or on line).

However, Akiyama does not teach the second processing section is responsive to the indication device to perform the second process only if the indication device indicates the enabled state.

Motomi teaches the second processing section is responsive to the indication device to perform the second process only if the indication device indicates the enabled state (please see the solution which indicates that the interfaces for receiving the print request " i.e., the second processing section" for performing the print data "the first command type" when the memory "the indication device" indicates the higher priority "i.e., enabled state").

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the second processing section of Akiyama to be responsive to the indication device to perform the second process only if the indication device indicates the enabled state as taught by Motomi. The suggestion for modifying the second processing section of Akiyama can be reasoned by one of ordinary skill in the art as set forth above by Motomi because the modified printing system would increase the advantages and flexibility of the printing operations by providing the priority of the print requesting to the user.

As to claim 2, Akiyama discloses every feature discussed in claim 1, and Akiyama further teaches that the setting means comprises command detection means for detecting a predetermined command (i.e., real time command) in the data stream received by the receiver (the real time command includes cancel or recover command from the host via the receiving means 62 in fig. 5 "col. 9, lines 26-27).

As to claim 3, Akiyama discloses every feature discussed in claim 2, and Akiyama further teaches that the indication device comprises a flag memory (col. 11, line 62) and the predetermined command includes a disabling command (i.e., cancel command in table 1 from col. 12), the setting means being responsive to the disabling command for setting a flag in the flag memory to the disabled state (col. 9, lines 26-30).

As to claim 4, Akiyama discloses every feature discussed in claim 3, and Akiyama further teaches the indication device comprises a flag memory and the predetermined command includes an enabling command, the setting means being responsive to the enabling command for setting a flag in the flag memory to the enabled state (col. 9, lines 51-52: the enabling command or the real time command includes recover from error command for resume the printing).

As to claim 8, Akiyama discloses every feature discussed in claim 2, and Akiyama further teaches the indication device comprises a flag memory (col. 11, lines 34-37) and the predetermined command includes an enabling /disabling command, the setting means being responsive to the enabling/disenabling command for setting one or more flags in the flag memory to the first/second state, the enabling/disabling command having at least two parameters, one parameter designating one or more commands of the second command type and

another parameter for setting for each designated command a respective flag in the flag memory to the enabled or the disabled state (col. 11, lines 34-37).

As to claims 9 and 10, Akiyama discloses every feature discussed in claim 2, and further teaches the predetermined command is of the first command type comprising parameter in the form of a stream of non-coded data (i.e., print data) and the setting means is responsive to the command detection means detecting the predetermined command for setting the state of the indication device to the disabled state or enabled state (for cancel command in col. 10, line 38-39).

As to claim 11, Akiyama discloses every feature discussed in claim 10, and further teaches a status information memory for storing status information indicative of reception of the predetermined command, and status information sending means, wherein the command detection means is adapted to detecting a second predetermined command in the data stream received by the receiver, the status information sending means being responsive to the command detection means detecting the second predetermined command for sending the status information to the host (col. 10, lines 32-36).

As to claim 12, Akiyama discloses every feature discussed in claim 11, and further teaches at least the first and the second processing sections and the setting means are implement by a program-controlled microprocessor (col. 10, lines 8-10).

As to claim 13, Akiyama discloses a method of controlling a printer connected to a host device comprising the steps of:

(a) receiving a data stream from the host device, the data stream including commands of a first command type (i.e., print data) and a second command type (i.e., command data) to control the printing apparatus (col. 7, line 66 to col. 8, line 1);

(b) detecting a predetermined command (i.e., real time command) among in the data stream received in step (a) and disabling or enabling execution of one or more commands of the second command type in response to the predetermined command (the real time command includes cancel or recover command from the host via the receiving means 62 in fig. 5 "col. 9, lines 26-27 and col. 9, lines 51-52: the enabling command or the real time command includes recover from error command for resume the printing).

(c) carrying out a first process in response to a command of the first command type received in step (a) (col. 8, lines 29-33: the data codes from the print data is processed for printing);

(d) carrying out a second process in response to a command of the second command type received in step (a), in preference to the step (c) (col. 8, lines 26-28: the command data is applied to the print data and controls the printing apparatus by control means 68).

However, Akiyama does not teach carrying out a second process in response to a command of the second command type received in step when execution of the command of the second command type is enabled.

Motomi teaches the second processing section is responsive to the indication device to perform the second process only if the indication device indicates the enabled state (please see the solution which indicates that the interfaces for receiving the print request " i.e., the second

processing section" for performing the print data "the first command type" when the memory "the indication device" indicates the higher priority "i.e., enabled state").

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the second processing of Akiyama to be responsive to the enable state to perform the second process as taught by Motomi. The suggestion for modifying the second processing section of Akiyama can be reasoned by one of ordinary skill in the art as set forth above by Motomi because the modified printing system would increase the advantages and flexibility of the printing operations by providing the priority of the print requesting to the user.

As to claims 14 and 15, Akiyama teaches step (b) comprises disabling or enabling execution of commands of the second command type in response to the predetermined command (the real time command includes cancel or recover command from the host via the receiving means 62 in fig. 5 "col. 9, lines 26-27 and col. 9, lines 51-52: the enabling command or the real time command includes recover from error command for resume the printing).

As to claims 16-17, 19-20, the combination of Akiyama and Motomi discloses the method for performing the claims 9-12 as indicated above.

As to claim 27, the combination of Akiyama and Motomi teaches the program from the storage medium for performing a method in claim 20 as indicated above.

5. Claims 5-7, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akiyama and Motomi in view of Miyasaka et al. (US Patent No. 6,453,208).

As to claim 5, the combination of Akiyama and Motomi discloses every feature discussed in claim 3.

However, Akiyama and Motomi do not teach a counter for counting an elapsed time from the moment the receiver receives the predetermined command, wherein the setting means is responsive to the counter for setting the state indicated by the indication device to the enabled state when the elapsed time exceeds a predetermined time.

Miyasaka teaches a counter for counting an elapsed time from the moment the receiver receives the predetermined command, wherein the setting means is responsive to the counter for setting the state indicated by the indication device to the enabled state when the elapsed time exceeds a predetermined time. (see step 406 in fig. 17 and col. 22, lines 15-18 and col. 23, lines 10-18).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the printing system of Akiyama and Motomi for counting an elapsed time from the moment the receiver receives the real time command and the enable state is set when elapsed time exceeds a predetermined time as taught by Miyasaka. The suggestion for modifying the system of Akiyama and Motomi can be reasoned by one of ordinary skill in the art as set forth above by Miyasaka because the modified print system would increase the efficiency for controlling the printer.

As to claim 6, Miyasaka disclose every feature discussed in claim 3, and Miyasaka further teaches a counter for counting a length of a data stream (i.e., the size of received data defined as one byte) received by the receiver from the moment the receiver receives the predetermined command, wherein the setting means is responsive to the counter for setting the state indicated device to the enabled state when the counter has counted a predetermined length (col. 22, lines 10-18 and col. 23, lines 10-18).

As to claim 7, Miyasaka discloses every feature discussed in claim 6, and Miyasaka further teaches the disabling command comprises a parameter designating the predetermined length (note any command from the received data includes the disabling command having the predetermined length, col. 22, lines 10-18).

As to claim 18, the combination Akiyama and Miyasaka teaches the method for performing the apparatus claim 5 as indicated above.

Response to Arguments

Applicant's arguments filed have been fully considered but they are not persuasive.

Applicant argued in page 11 " the second processing section executes a second process in accordance with any command of the second type, and that the execution of such process is performed in preference to the execution of a first process by the a first processing section if the printer is in an enabled state.... the execution of a process corresponding to the command type having the higher priority is performed only when the printer is in enabled state, but the execution of the command type having the lower priority is not subject to that condition". In reply, the new cited reference of Motomi teaches Motomi teaches the second processing section is responsive to the indication device to perform the second process only if the indication device indicates the enabled state (please see the solution which indicates that the interfaces for receiving the print request " i.e., the second processing section" for performing the print data "the first command type" when the memory "the indication device" indicates the higher priority "i.e., enabled state").

For the above reasons, it is believed that the cited prior art fully discloses the claimed invention and the rejection stand.

Conclusion

Applicant's arguments with respect to claims 1-20, and 27 have been considered but are moot in view of the new ground(s) of rejection. This action is made **non-final**.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas Q. Tran whose telephone number is (703) 305-4857 or E-mail address is Douglas.tran@uspto.gov.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Douglas Q. Tran
Mar. 03, 2004